

**IN THE CLAIMS:**

Please amend claims 1, 4, 19 and 21 as shown in clean form below pursuant to 37 C.F.R. 1.121(c)(1)(i). A marked-up version of the amended claims pursuant to 37 C.F.R. 1.121(c)(1)(ii) is provided separate from this amendment in Appendix I.

1. (Amended)        A blood collection apparatus comprising:  
  
                         a blood collection tube defining an inner surface and a closed end; and  
  
                         a thixotropic gel being configured to form a transverse barrier between a lighter phase and a heavier phase of a blood sample during centrifugation, the gel being selectively deposited on the inner surface, and displaced a distance relative to the end, said distance based on at least one dimension of the blood collection tube and a volume of the blood sample being collected.

4. (Amended)        A blood collection apparatus comprising:  
  
                         a blood collection tube defining a central inner surface and a closed end; and  
  
                         a thixotropic gel being configured to form a transverse barrier between a lighter phase and a heavier phase of a blood sample during centrifugation, the gel being deposited on a portion of the central inner surface and displaced a distance relative to the closed end, said distance based on the portion of the central inner surface defining a predetermined first limit and a predetermined second limit relative to the end, the limits being predetermined based on at least one dimension of the blood collection tube and the volume of a blood sample being collected.

19. (Amended) A blood collection apparatus comprising:  
means for collecting a sample of blood defining a central inner surface and a closed end; and

a thixotropic gel being configured to form a transverse barrier between a lighter phase and a heavier phase of a blood sample during centrifugation, the gel being deposited on a predetermined portion of the central inner surface and displaced a distance relative to the closed end, said distance based on the predetermined portion that is predetermined based on at least one dimension of the means for collecting a blood sample and a volume of the blood sample being collected.

21. (Amended) A method for separating a sample of blood into portions including a light serum portion and a heavy cellular portion, the method comprising the steps of:

providing a blood collection tube defining a central inner surface and a closed end;

providing a dispensing apparatus configured to dispense a thixotropic gel, being configured to form a transverse barrier between the light serum portion and the heavy cellular portion of a blood sample during centrifugation, the gel being deposited along a portion of the central inner surface and displaced a distance relative to the closed end, said distance based on the portion of the central inner surface defining a predetermined first limit and a predetermined second limit relative to the end, the limits being predetermined based on at least one dimension of the blood collection tube and a volume of the blood sample being collected;

depositing the gel for centrifugation via the dispensing apparatus along the portion of the central inner surface;